

# COMPUTER SCIENCE MAJOR (COMPREHENSIVE)

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## Requirements

The comprehensive Computer Science Major provides the background necessary to prepare students for positions in industry or to pursue graduate study. Students completing this major will have a sufficient understanding of the basic principles and concepts in computer science but also will be able to meet immediate demands for solving real-world computational problems. This program is an ideal choice for students who intend to work as computer science professionals.

### 57 total credits

Code	Title	Hours
<b>Math and Computer Science Core Courses</b>		
MATH 240	Calculus and Analytic Geometry I	4.00
MATH 310	Introduction to Abstract Mathematics	3.00
MATH 320	Discrete Structures	4.00
CSCI 201	Introduction to Programming	3.00
CSCI 202	Object-Oriented Programming	3.00
CSCI 224	Assembly Language Programming	4.00
CSCI 303	Algorithms and Data Structures	4.00
CSCI 340	Software Development and Professional Practice	4.00
CSCI 356	Database Systems	3.00
CSCI 451	Operating Systems	4.00
CSCI 461	Computer Architecture	4.00
CSCI 470	Net-Centric Computing	4.00
CSCI 499	Group Capstone Project	3.00
<b>Advanced Topics Required Course</b>		
Select two of the following:		6.00
CSCI 327	Embedded Systems Design	
CSCI 331	Computer Graphics and Game Design	
CSCI 351	Internet Programming	
CSCI 370	Computer Security	
<b>Computational Theory Required Course</b>		
Select one of the following:		4.00
MATH 421	Theory of Computation	
MATH 425	Algorithm Design and Analysis	
<b>Total Hours</b>		<b>57.00</b>